Operating Instructions
K30 TWIN Espresso Grinder

„Grind-on-Demand“

MAHLKÖNIG
The professional art of grinding
since 1924

Dear customer / service personnel

the Double Espresso Grinder „K30 TWIN" is a fully automatic espresso coffee grinder of the proven MAHLKÖNIG quality.

We have developed this product with over 80 years of experience in the manufacture of coffee grinders assuring you of high quality grinding of all kinds of espresso and other types of coffee beans. Espresso as the base of various coffee specialities requires a very precise grind. With the „K30 TWIN" you can now grind two different kinds of espresso (like decaf and regular) simultaneously in one machine.

Read through and observe the operating instructions, so you and your customers will thoroughly enjoy the "K30 TWIN". Follow the safety instructions at all time and also advise your personell.

Please store the instructions in a safe place. If anything is unclear or additional information is required, please contact your authorized dealer or us as the manufacturer. We will be pleased to advise you further.

We wish you unlimited pleasure and success with our product

MAHLKÖNIG GmbH & Co. KG

Table of Contents

1. Safety
- 1.1 Symbols
- 1.2 Safety Instructions
- 1.3 Purpose of Use
- 1.4 User Requirements

2. Technical data

3. Description

4. Set-up and Initial Adjustments
- 4.1 Place of installation
- 4.2 Locking in the hoppers
- 4.3 Electrical Installation
- 4.4 Adjustment of the portafilter rests
- 4.5 Adjustment of the cleaning alarm

5. Operation
- 5.1 Instructions for the first grinding steps
- 5.2 Operating the grinder
- 5.3 Interruption of grinding (break-function)
- 5.4 Software Menu
- 5.5 Describtion of the software chapters

6. Cleaning
- 6.1 Cleaning with GRINDZ™ Grinder Cleaner
- 6.2 Cleaning the Drip Tray and the Hoppers
- 6.3 Cleaning the Grinder Placement Surface
- 6.4 Cleaning the Grinder Casing

7. Maintenance and Repair
- 7.1 Grinding fineness adjustment with the grinder switched ON
- 7.2 Taking off the grinder cover
- 7.3 Basic Adjustment of The Interior Grinders
- 7.4 Cleaning of the Grinding Mechanism
- 7.5 Grinding Disc Exchange
- 7.6 Removal of The Integrated Grinder

8. Trouble Shooting For Operating Faults
- 8.1 Safety Devices of the Grinder
- 8.2 Operating Fault
- 8.3 Alarm Signals Showing in The Display

9. Spare Parts

10. Wiring Diagram

11. Certificate

12. Warranty Conditions

1. Safety

Please read carefully and observe the following safety instructions. Failure to do so can result in damage to the grinder and danger to the user.

1.1 Symbols

The following two symbols are used in these operating instructions:

Safety Instruction:
Imminent accident danger if you fail to observe.

General Instruction:
Failure to observe can result in damage to the grinder and optimum operation cannot be guaranteed.

1.2 Safety Instructions

Only whole roasted coffee beans may be ground in the K30 TWIN!

When unpacking please inspect whether the power supply (voltage) complies with the grinder voltage on the manufacturer's name plate at the bottom of the grinder.

Always remove the electrical plug from the outlet prior to removing the hopper or conducting maintenance or cleaning work on the grinder.

Never operate a grinder with a damaged electrical cord. Inspect the grinder regularly for damages of the electrical cord, plug, etc.

Any required repairs may only be conducted by authorized service personell. For this reason, please contact a customer service repair facility, your dealer or us directly as the manufacturer.

Do not exceed the maximum allowable continuous grinding time of 20 min. Afterwards, allow the grinder to cool off before the next operation. Do not exceed the maximum allowable running cycle of 4 sec. ON, 6 sec. OFF (6 double shots per minute, S3 40%) for 230V / 50Hz, and 6 sec. ON, 15 sec. OFF (4 double shots per minute, S3 25%) for 115V / 60Hz.

Do not make any modifications or alterations to the grinder. The manufacturer assumes absolutely no liability for damages occurring from failure to observe these instructions.

Children cannot recognize the dangers that can exist in the operation of electrical grinders. For this reason never leave children unsupervised with electronic appliances such as this grinder.

Never operate the grinder in damp or wet surroundings. Never operate with wet hands

1.3 Purpose of Use

Only whole roasted coffee beans may be ground in the K30 TWIN grinder. Pay attention to use only clean and unground coffee. Never use the grinder to grind other products or objects.

1.4 User Requirements

No special requirements are necessary for the user of this grinder. It is nevertheless a prerequisite that these operating instructions have been carefully read and understood and that all instructions provided are observed. In addition safety-conscious operation is expected.

2. Technical Data

Type	K30 TWIN
Voltage/Frequency	200-230V / 50/60Hz 240V / 50Hz 100-115V / 50/60Hz
Rotation	
230-240V	1420 rpm
110-115V	1640 rpm
Sound Emission	
Idle Operation	65 dB
Operation	85 dB
Pre-Fuse	16 A-slow
Motor Fuse	5x20 10A slow
Overload Circuit Breaker	
200-240V	4A T
110-115V	7A T
Max. Permissible Running Time of the Grinder	230V: 4 sec ON, 6 sec OFF 115V: 6 sec. ON, 15 sec. OFF
Dimensions in mm	B 368, H 590, T 300
Weight	26 kg (57.3 lbs)
Hopper Capacity	2 x 750 g (2 x 1.65 lbs.)

(Please request technical data for other voltages and frequencies from the manufacturer or dealer)

3. Description

The main components and operating elements are pictured in the illustration.

Pos. 1	Hopper with lid and finger protection
Pos. 2	Lock screw for hopper
Pos. 3	Grinding fineness adjustment
Pos. 4	Brake for grind adjustment
Pos. 5	Grinder cover with lock screw
Pos. 6	Display
Pos. 7	Pre-selection button „single espresso“
Pos. 8	Pre-selection button „double espresso“
Pos. 9	„Program“-button
Pos. 10	Spout
Pos. 11	Portafilter mounting
Pos. 12	Portafilter rest
Pos. 13	Fastening screw for portafilter rest
Pos. 14	Start / Stop switch
Pos. 15	Drip tray (with hopper slides underneath)
Pos. 16	Main switch (at the back of the grinder)

4. Set-up and Initial Adjustments

You have received your grinder in operating condition. Now you only need to place it in a safe place and connect it to the main power socket. Proceed as follows:

4.1 Place of Installation

Place the grinder on a level, vibration-free surface.

Never operate the grinder in moist, or even worse, in wet surroundings!

4.2 Locking in the hoppers

Set the hopper into the bayonet socket. Grab the hopper with both hands and turn it carefully in clockwise direction, until the bayonet locks in.

Always loosen the grind adjustment brakes and turn both adjustments to fine (setting 0) when locking in the hoppers. Turning the grind adjustment ring repeatedly without loosening the brake could damage the interlock.

Fasten the lock screw for the hopper (pos. 2) to prevent the hoppers from unauthorized removal.

4.3 Electrical Installation

Prior to plugging in observe the following safety instructions:

Protect your device with separate pre-fuses (not included in the scope of delivery) according to the information provided under point 2 „Technical Data“

Make sure that the pre-fuse is not overloaded by other devices (e.g. fan heaters, deep freezers, etc)

Check whether the main voltage and frequency correspond to the information on the rating plate underneath the grinder.

Insert the plug into the corresponding grounded outlet.

4.4 Adjustment of the portafilter rests

The grinder is designed so that all different portafilters from various espresso machines fit into the rest for hands-free grinding operation.

4.4.1 Keep the grinder switched off. Slightly loosen the allen screws (pos. 13) with the included allen screw driver size 3mm and pull down the portafilter rest (pos. 12).

4.4.2 Push the portafilter of your espresso machine onto the start/stop switch between the portafilter mounting (pos. 11) and the rest (pos 12). Now push up the portafilter rest until the portafilter holds on its own. Now refasten the screws.

The adjustment is correct when the portafilter independently remains in the mounting.

In case the portafilter rests does not fit your espresso machine's portafilter, please contact us or your local dealer. We will be happy to send you a different rest.

4.5 Adjustment of the cleaning alarm

The software of the K30 TWIN has an integrated cleaning alarm which is activated at a pre-set amount of shots taken. This alarm should remind you of cleaning the grinder regularly in order to increase the discs' lifetime.

MAHLKÖNIG recommends: The cleaning limit should be set to the amount of shots that are ground per week. (For the set-up of the limit and for resetting the counter after cleaning see chapter 5.5.9)

5. Operation

Once the grinder is set up and ready to operate a grinding test should be carried out.

5.1 Instructions for the first grinding steps

Only use the K30 TWIN espresso grinder for whole roasted coffee beans.

Observe the safety instructions under 1.2!

Never exceed the maximum permissible continuous operating cycle of 4 sec ON, 6 sec OFF (S3 40%). Also do not exceed the maximum allowable continuous grinding time of 20 min. Afterwards, allow the grinder to cool down before the next operation.

5.2 Operating the grinder

5.2.1 Switch on the grinder at the back of the casing (pos. 16).

5.2.2 Open the hopper and pour whole roasted espresso beans into the hopper.

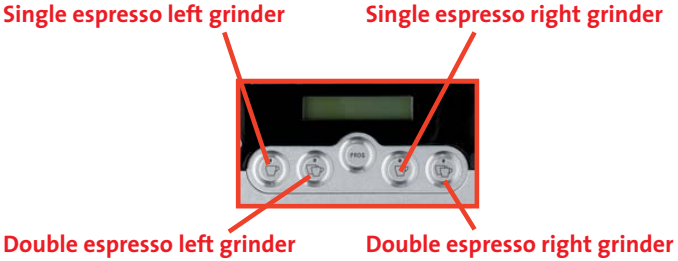
Never pour in coffee powder which would result into immediate blocking of the discs.

5.2.3 Adjust the grinding fineness by pulling the grind adjustment interlock (pos. 4) and turning the ring (pos. 3) including the hopper to the desired position. Note that „0" is the finest setting and „10" is the coarsest. Let go and re-lock the brake to fix the setting.

Test runs have proved grind adjustments 1 – 4 to be the most common settings for espresso depending on the origin, roast and blend. This should be taken into account when adjusting the grinder for the first time.

5.2.4 For the first test run the grinding time settings are pre-programmed for single shots to 2.0 sec and for double shots 4.0 sec. For changing these settings please see chapter 5.3.

5.2.5 Choose the single or double pre-select-button according to your portafilter. The LED shows which button is selected.


Single espresso left grinder
Single espresso right grinder
Double espresso left grinder
Double espresso right grinder

5.2.6 Push your espresso machine's portafilter into the partafilter mounting (pos. 11/12) so that the grinding process starts.

The first operation will not result in the desired amount of espresso because the grinder has to fill up with ground coffee. The second shot should give the correct result.

5.2.7 Now brew a test portion of espresso using your machine. If the result is unsatisfactory, alter the adjustment again by varying the grinding time and grinding fineness until the best coffee results have been achieved.

5.3 Interruption of grinding (break-function)

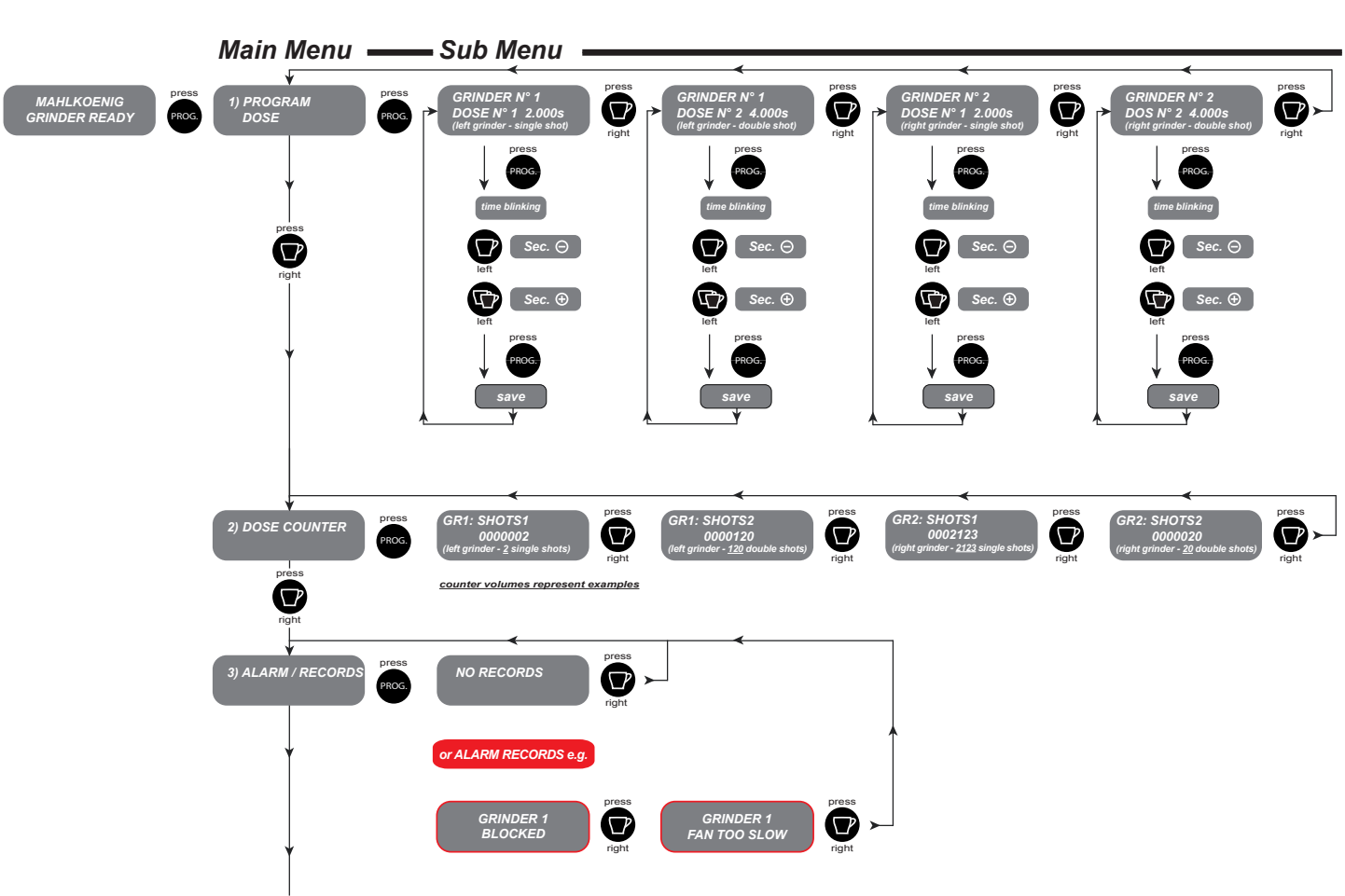
If the grinding process is interrupted before the set grinding time has expired, the LED in the active pre-selection button flashes. The grinding process can be re-started by pushing the portafilter back into the mounting. The missing quantity is ground. If this is not desired push the pre-selection button and the entire set grinding quantity or grinding time is available once again.

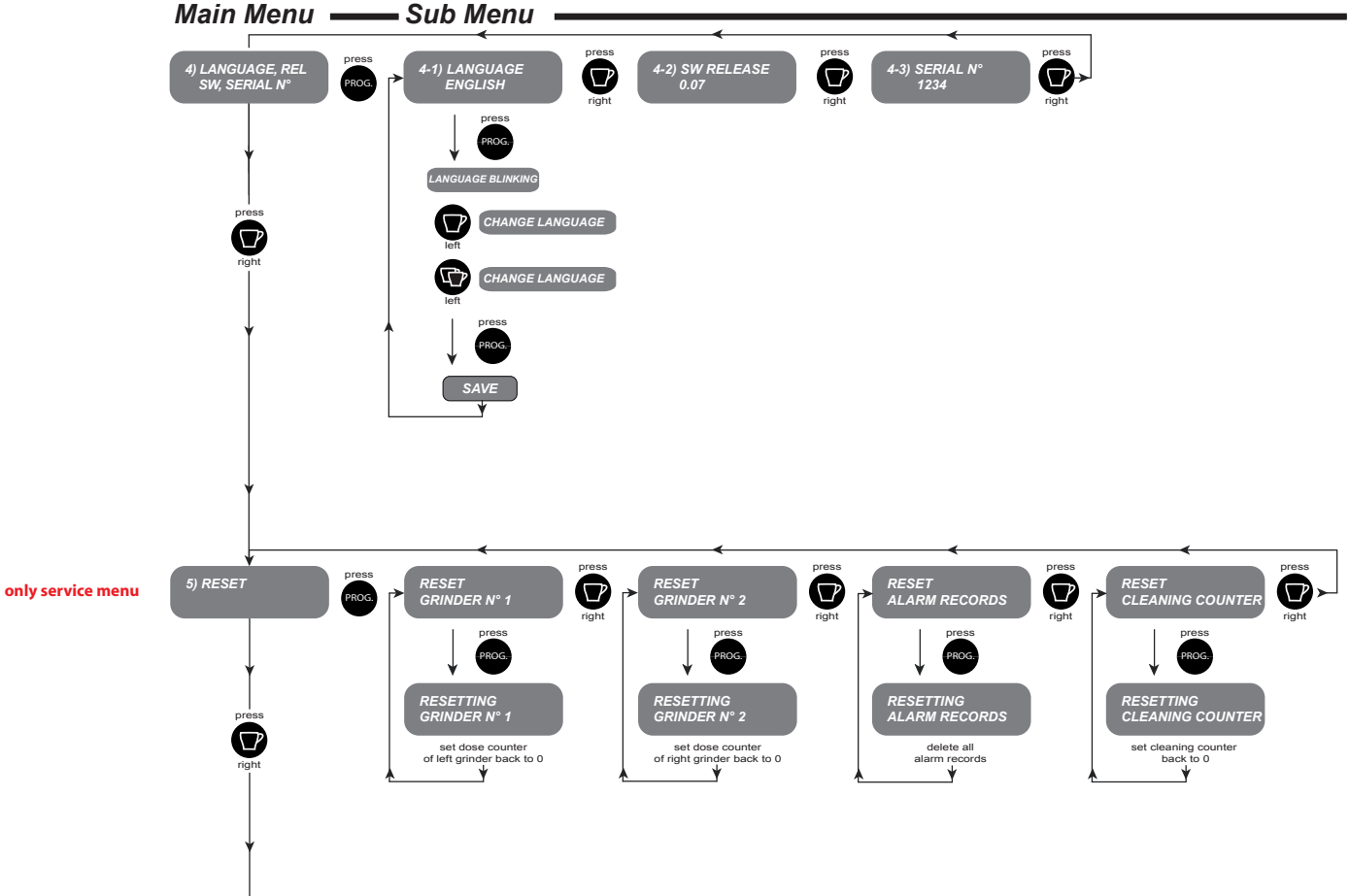
5.4 Software Menu

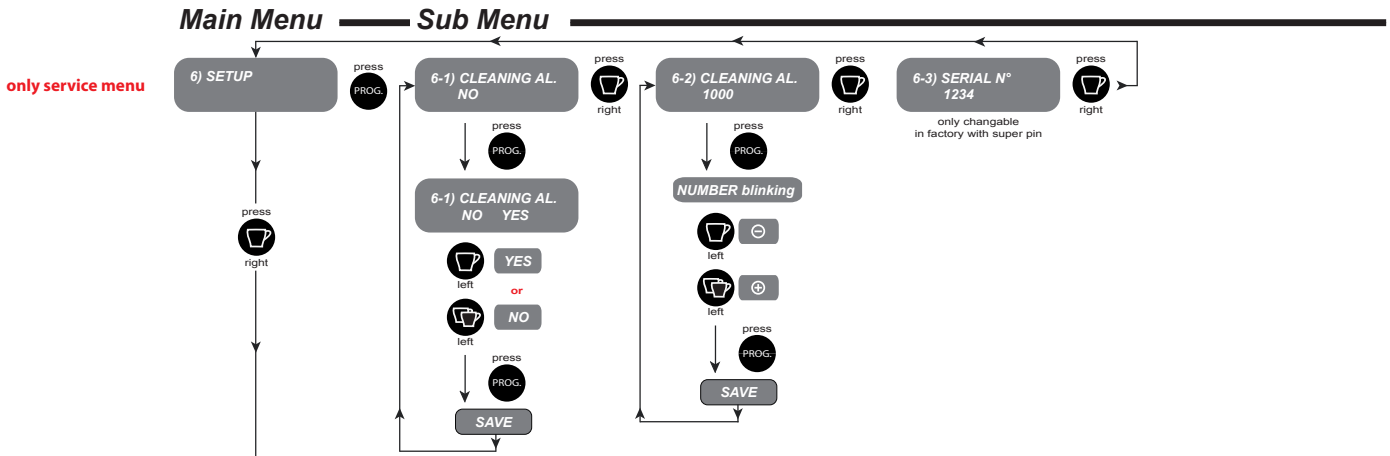
The following overview shows the handling of the K30 TWIN's software.

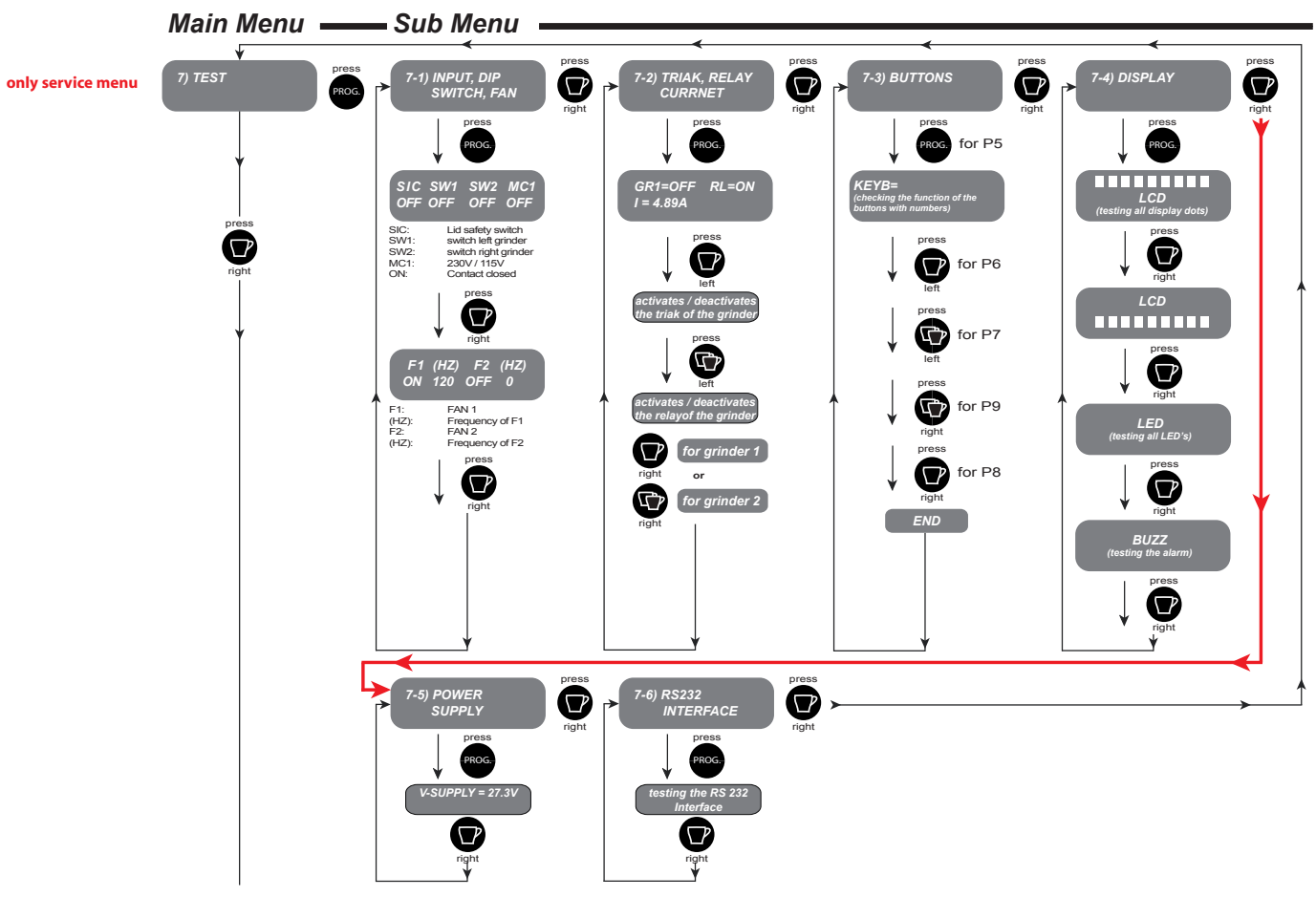
PROG.	Enter (go into a lower software menu level)	P5
right	go foreward in menu	P8
right	go back in menu	P9
left	decrease values in menu (- button)	P6
left	increase values in menu (+ button)	P7

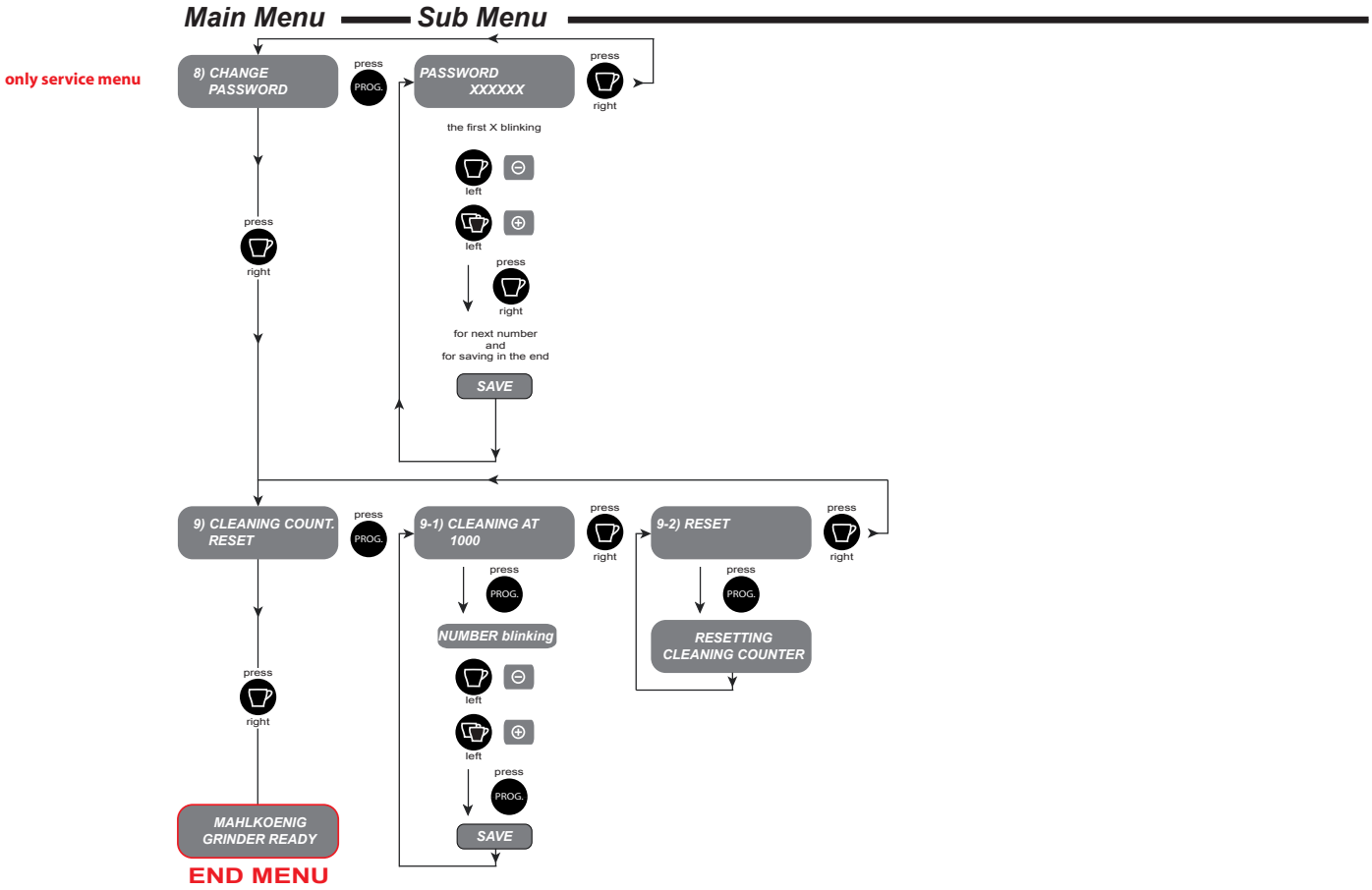
Display


Main Menu
Sub Menu
MAHLKOENIG GRINDER READY
press PROG.
1) PROGRAM DOSE
press PROG.
GRINDER N° 1 DOSE N° 1 2.000s
(left grinder - single shot)
press right
GRINDER N° 1 DOSE N° 2 4.000s
(left grinder - double shot)
press right
GRINDER N° 2 DOSE N° 1 2.000s
(right grinder - single shot)
press right
GRINDER N° 2 DOS N° 2 4.000s
(right grinder - double shot)
press right
press PROG.
time blinking
press left
Sec. ⊖
Sec. ⊕
press PROG.
save
press right
2) DOSE COUNTER
press PROG.
GR1: SHOTS1 0000002
(left grinder - 2 single shots)
GR1: SHOTS2 0000120
(left grinder - 120 double shots)
GR2: SHOTS1 0002123
(right grinder - 2123 single shots)
GR2: SHOTS2 0000020
(right grinder - 20 double shots)
counter volumes represent examples
3) ALARM / RECORDS
NO RECORDS
or ALARM RECORDS e.g.
GRINDER 1 BLOCKED
GRINDER 1 FAN TOO SLOW


Main Menu
Sub Menu
4) LANGUAGE, REL SW, SERIAL N°
press PROG.
4-1) LANGUAGE ENGLISH
press right
4-2) SW RELEASE 0.07
press right
4-3) SERIAL N° 1234
press right
press PROG.
LANGUAGE BLINKING
left
CHANGE LANGUAGE
left
CHANGE LANGUAGE
press PROG.
SAVE
press right
only service menu
5) RESET
press PROG.
RESET GRINDER N° 1
press right
RESET GRINDER N° 2
press right
RESET ALARM RECORDS
press right
RESET CLEANING COUNTER
press right
press PROG.
RESETTING GRINDER N° 1
set dose counter of left grinder back to 0
RESETTING GRINDER N° 2
set dose counter of right grinder back to 0
RESETTING ALARM RECORDS
delete all alarm records
RESETTING CLEANING COUNTER
set cleaning counter back to 0
press right


Main Menu
Sub Menu
only service menu
6) SETUP
press
PROG.
6-1) CLEANING AL.
NO
press
right
6-2) CLEANING AL.
1000
press
right
6-3) SERIAL N°
1234
press
right
only changable
in factory with super pin
press
PROG.
6-1) CLEANING AL.
NO YES
left
YES
or
left
NO
press
PROG.
SAVE
press
PROG.
NUMBER blinking
left
⊖
left
⊕
press
PROG.
SAVE
press
right


Main Menu
Sub Menu
only service menu
7) TEST
press
right
press
PROG.
7-1) INPUT, DIP SWITCH, FAN
press
right
7-2) TRIAK, RELAY CURRNET
press
right
7-3) BUTTONS
press
right
7-4) DISPLAY
press
right
press
PROG.
SIC SW1 SW2 MC1
OFF OFF OFF OFF
SIC: Lid safety switch
SW1: switch left grinder
SW2: switch right grinder
MC1: 230V / 115V
ON: Contact closed
press
right
F1 (HZ) F2 (HZ)
ON 120 OFF 0
F1: FAN 1
(HZ): Frequency of F1
F2: FAN 2
(HZ): Frequency of F2
press
right
GR1=OFF RL=ON
I = 4.89A
press
left
activates / deactivates the triak of the grinder
press
left
activates / deactivates the relayof the grinder
right
for grinder 1
or
right
for grinder 2
for P5
KEYB=
(checking the function of the buttons with numbers)
press
left
for P6
press
left
for P7
press
right
for P9
press
right
for P8
END
LCD
(testing all display dots)
LCD
LED
(testing all LED's)
BUZZ
(testing the alarm)
7-5) POWER SUPPLY
V-SUPPLY = 27.3V
7-6) RS232 INTERFACE
testing the RS 232 interface


Main Menu
Sub Menu
only service menu
8) CHANGE PASSWORD
press
PROG.
PASSWORD XXXXXX
press
right
the first X blinking
left
left
press
right
for next number
and
for saving in the end
SAVE
press
right
9) CLEANING COUNT. RESET
press
PROG.
9-1) CLEANING AT 1000
press
right
9-2) RESET
press
right
press
PROG.
NUMBER blinking
press
PROG.
RESETTING CLEANING COUNTER
left
left
press
PROG.
SAVE
press
right
MAHLKOENIG GRINDER READY
END MENU

Pressing the PROG-button once enters the user menu (menu chapters 1-4 and 9).

Pressing the PROG-button for appr. 5 seconds and typing in the password enters the service menu (menu chapters 1-8).

Password:
Until serial number 18571: „666 666“ (software version V0.12)
From serial number 18572: „000 000“ (software version V0.13)

5.5 Describtion of the software chapters

5.5.1 Program Dose
Adjust and change the grinding time for single and double dosing for both grinders.

GRINDER N°1 = left grinder
GRINDER N°2 = right grinder

DOS N°1 = single espresso
DOS N°2 = double espresso

The time can be set in 0.005 sec steps. A change of 0.1 seconds adds or takes away approximately 0.5 gram of coffee. (This reference value can vary for different coffees and roasting degrees.)

Press and hold the PROG-button after changing the time to quick-exit the menu. The display will show „MAHLKOENIG GRINDER READY“.

5.5.2 Dose Counter
Read the counters for single and double shots for both grinders.

5.5.3 Alarm Records
Alarms are saved in the order of appearance (the last one to appear first in line). 20 alarms can be saved, the 21st overwrites the oldest. For a detailed describtion of all alarms with causes and remedies please see chapter 8.3.

5.5.4 Language, Software Release, Serial Number
Change the language of the menu (Italian, English, French, German, Spanish). Read the software release number and serial number of the grinder.

5.5.5 Reset (only in the service menu)
All counters and alarm records can be set back to Zero or deleated respectively.

5.5.6 Setup (only in the service menu)
Set up the cleaning alarm:
- Switch ON or OFF the cleaning alarm.
- Set the Cleaning Alarm Limit, which is the max. allowable limit that can be set in menu point 9.

5.5.7 Test (only in the service menu)
Check the functionality of the different electrical components and functions in the grinder. This menu point should help service partners to locate potential malfunctions.

5.5.8 Change Passwort (only in the service menu)
Change the passwort to your individual 6-digit number. (see chapter 5.4)

5.5.9 Cleaning Counter Reset
Set the cleaning counter to the appropriate amount of shots so that the alarm reminds the user to clean the discs on a regular basis. (see chapter 4.5)

Set the counter back to Zero after cleaning the grinder.

6. Cleaning

We recommend cleaning your espresso grinder regularly. Only use food-safe cleaning detergents.

Always pull the main plug from the socket before carrying out maintenance or cleaning work on the grinder.

Observe the safety instructions under 1.2.

Do not let any foreign object fall into the grinding mechanism.

6.1 Cleaning with GRINDZ™ Grinder Cleaner

We recommend cleaning your espresso grinder once a week with our GRINDZ™ Grinder Cleaner.

MAHLKÖNIG recommends: The cleaning limit should be set to the amount of shots that are ground per week. (For the set-up of the limit and for resetting the counter after cleaning see chapter 5.5.9)

Remove all beans from the hopper or take the hopper slides from under the drip tray and push them into the slots in the bayonet adapter. Remove the lock screw. Now you can take off the hopper.

When taking off the hopper ALWAYS release the grind adjustment brakes and turn both rings to coarse. This will block the adjustment. Turning the grind adjustment ring repeatedly without loosening the brake could damage the interlock.

Grab the hopper with both hands and turn it anti-clockwise until it is released by the bayonet. Empty the input chute of all espresso beans and vacuum out the disc casing.

Also empty the hopper and relock it onto the grinder. Take off the hopper slide.

When engaging the hopper into the bayonet ALWAYS release the grind adjustment brakes and turn both rings to fine. This will block the adjustment. Turning the grind adjustment ring repeatedly without loosening the brake could damage the interlock.

Drop the recommended dose of GRINDZ (35 - 40g) into the empty grinder hopper. You can also use the cap of the jar for dosing. A full cap will yield between 35 - 40 grams.
Turn the fineness adjustment to coarse and operate as if grinding coffee beans.

Once complete, we recommend passing twice as much coffee through to purge any residue.

Set the cleaning counter back to Zero, if the grinder was cleaned due to the cleaning alarm. (see chapter 5.5.9)

6.2 Cleaning the Drip Tray and the Hoppers
The hoppers, their lids and the drip tray (without hopper slides) can be cleaned in a dishwasher or in a bath of water with dish detergent.

Depending on the dish washing detergent the transparent plastic parts of the hopper can slightly fade out.

6.3 Cleaning the Grinder Placement Surface

6.3.1 Pull out the main plug.

6.3.2 Take off the drip tray.

6.3.3 Tilt the grinder to one side and clean the area on which it stands and the bottom of its base. Both surfaces must be dry and free of oil and grease.

6.3.4 Reposition the grinder and re-insert the drip tray.

6.4 Cleaning the Grinder Casing
Clean the outside of the casing from time to time using a damp cloth.

Be carefull of sharp edges when cleaning. There is a risk of injury.

7. Maintenance and Repair

Any required repairs may only be conducted by authorized specialist personnel. For this reason, please contact a customer service repair facility, your dealer or us directly as the manufacturer.

Always pull the main plug from the socket before carrying out maintenance or cleaning work on the device!

Inspect the grinder regularly for damage, particularly to the electrical cable, plug, etc.

7.1 Grinding fineness adjustment with the grinder switched ON

Depending on the wear and tear of the grinding discs or after opening the interior grinder the setting of the finest grind adjustment has to be checked. Proceed as follows:

7.1.1 Set the grinding fineness adjustment to „0“.

7.1.2 Close and remove the hopper.

7.1.3 Remove the remaining beans from the filler shaft and vacuum out the grinder casing.

7.1.4 Remove the sealing ring from the filler shaft.

7.1.5 Loosen – do not unscrew – the adjusting screws with the allen key size 2.5mm.

7.1.6 Insert the adjusting handle (service tool) into the filler shaft. The adjusting handle must engage in the slot into filler shaft's transverse bar.

7.1.7 Hold the adjusting handle firmly and push the portafilter into the portafilter mounting until the grinder switches on.

7.1.8 Whilst the grinder is running, turn the adjusting handle clockwise until a slight ringing sound becomes audible. Now turn the adjusting handle slightly anti-clockwise until no further ringing sound can be heard.

It is important to ensure that no grinding disk „rattling" can be heard at the finest setting! Otherwise the service life of the discs will be significantly reduced.

7.1.9 Tighten the adjusting screws and remove the adjusting handle from the filler shaft.

7.1.10 Insert the sealing ring again. If the sealing ring is damaged it must be replaced.

7.1.11 Replace the hopper and allow it to engage in the bayonet and replace the lock screw. Open the hopper slide.

7.1.12 Reset the desired grinding fineness.

7.1.13 Push your espresso machine's portafilter into the portafilter mounting (pos. 11/12) until the grinding process is switched on.

7.1.14 Only remove the portafilter once the grinding process has been completed. Repeat approximately twice in order to fill the grinder casing with the re-adjusted ground coffee.

7.2 Taking off the grinder cover

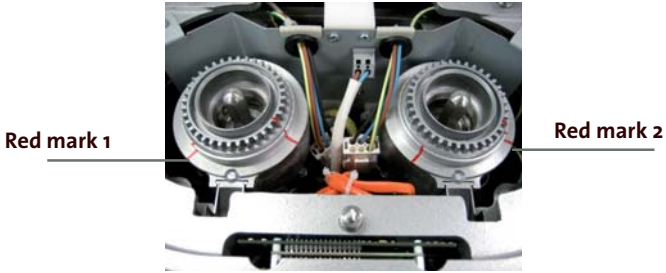
Grind or take out all coffee bean residues. Switch off the grinder and pull the main plug. Turn both grind adjustment rings to coarse and fix the brakes. Loosen the lock screw in the front with the allen screw driver size 2mm. Carefully lift the grinder cover upwards.

7.3 Basic Adjustment of The Interior Grinders

The basic adjustment to a moderately fine setting has been carried out in the factory using espresso beans. The following markings have been made on the grinding mechanism (interior):

Red mark 1: Basic adjustment 0, finest setting and minimum grinding disc spacing

Red mark 2: Basic factory setting and also the position for installing and removing the lid, in order to achieve the finest setting after positioning the lid.



Never rotate the grinding discs clockwise further then the red mark 1, as the grinding discs may otherwise be damaged.

7.4 Cleaning of the Grinding Mechanism

After opening the grinder cover the grinding mechanism with the discs can be vacuumed. Check for foreign objects in the grinding gear.

Do not change any grinder settings. The discs could be damaged when re-assembling the grinder.

Carefully vacuum the grinder casing. Take care not to damage any cables.

7.5 Grinding Disc Exchange

Grinding disc replacement should only be carried out by authorised specialists or a customer service centre. The „Repair manual K30 TWIN grinding disc replacement and basic adjustment“ can be downloaded for replacing grinding discs.

Grinding disc replacement may also be carried out using a replacement (AT) integrated grinder. To do this, order an AT integrated grinder. On receipt of the AT integrated grinder, remove your integrated grinder from the K 30 TWIN according to chapter 7.6 and install the AT integrated grinder into the K 30 TWIN. Return your old integrated grinder in the packaging.

7.6 Removal of The Integrated Grinder

For safety reasons the interior grinders are fixed to the casing's ground plate.

7.6.1 Disconnect the main plug. Close and remove the hoppers. Place the grinder on its back and unscrew the hex nuts of the motors (three each). Store the nuts and washers in a safe place. Re-position the grinder on its rubber feet

7.6.2 Take off the grinder cover (see chapter 7.2)

motors' plug-in connectors. Carefully pull the integrated grinder out of the casing.

Do not change any grinder settings. The discs could be damaged when re-assembling the grinder.

8. Trouble Shooting For Operating Faults

8.1 Safety Devices of the Grinder

Thermal overload circuit breaker

The motor of the grinder is protected by a thermal overload circuit breaker which interrupts the motor's electric circuit in the event of electric overload. The display shows an alarm signal. Pressing the PROG-button or the right single shot button releases the grinder back to operation mode.

The user has no influence whatsoever on this circuit breaker. If the circuit breaker trips repeatedly an authorised service partner must be consulted as the motor's winding may be damaged.

Motor protector

A thermo switch is built into the motor's winding to block the motor in case of overheating. The display shows an alarm signal. Let the motor cool down for approx. 30 minutes. The switch will connect automatically when the winding is functional again.

Magnetic switch in the grinder's lid

The lid of the grinder is secured with a magnetical switch. The grinder only operates with the lid closed. In case the grinder cover is opened with the main switch ON there will be an alarm signal in the display (chapter 8.3). Only closing the cover and pressing the PROG-button will clear the alarm.

8.2 Operating Fault

Defect	Cause	Remedy
The grinder hums but does not grind.	The spout is clogged.	Set grinding fineness to „coarse" and trigger the grinding process. The grinder will then grind itself free. Afterwards, return the setting to the desired grinding fineness.
	Grinding is set too fine.	Turn the grinding fineness setting to the right, to „coarse", and trigger the grinding process. The grinder will then grind itself free. Afterwards, return the setting to the desired grinding fineness.
	A foreign object is in the grinding mechanism.	Clean the grinding mechanism as described and remove the foreign object. Observe the safety instructions!
The grinder does not grind, the display is lit, single cup is pre-selected.	The grinding time is set to 0.	Reset the grinding time.

Defect	Cause	Remedy
The grinder does not start, the display is not lit.	The main plug is not inserted.	Insert the main plug into the socket.
	The pre-fuse has tripped.	Check the pre-fuse. Restore the pre-fuse to its initial state or replace it. Determine whether other devices are connected to this fuse.

In the case of other malfunctions or continued faults, please contact your dealer or your authorised customer service centre.

8.3 Alarm Signals Showing in The Display

Several sensors have been built into the grinder in order to control operation and to protect the motor and the grinding gear. The following alarm signals can show in the display:

Alarm Record	Cause	Correction
LOSS DATA	• Saved data was lost.	• Press PROG-button. Grinders are not blocked.
GRINDER X BLOCKED	• Current consumption higher than limit. • Motor blocked. • Foreign object/ beans blocking the grinder. • Jammed spout. • Exploring coil on power board malfunctioning.	User: • Press PROG-button. The other grinder can be used again. • Turn grind adjustment of blocked grinder to coarse. Switch off and back on the grinder, start grinding, the grinder grinds itself free. Reset the grind adjustment to the desired espresso setting. • Clean the spout. Take off the cover and check the interior grinder's spout (position of flat spring). • Interchange the grinders' plugs at the power board to determine the cause of the malfunction. (grinder or board) • Check current consumption in service-menu point 7. (desired value at idle operation: I < 3,5A

Alarm Record	Cause	Correction
		Service technician: • Test exploring coil on power board. If applicable change power board.
TRIAC GRINDER X OUT OF WORK	• Triac not interconnected (optical coupler defective). • Grinder's plug not connected. • Fuse defective. • Triac defective. • Capacitor defective. • Temperature sensor in the motor winding defective (0A) • Circuit board failure.	User: • Press PROG-button. The other grinder can be used again. • Check grinder's plug for correct position. • Check capacitors' connections and correct position. • Interchange the grinders' plugs at the power board to determine the cause of the malfunction. (grinder or board) Service technician: • Interchange capacitors and test • Check optical coupler (disassemble power board) • Check triac (disassemble power board)
GRINDER X FAN BLOCKED	• Foreign object is blocking the fan. • Plug at processor board not connected. • Fan defective.	• Check fan for foreign objects. • Interchange the fans' plugs at the processor board to determine the cause of the malfunction. (fan or socket) • Exchange fan.

Alarm Record	Cause	Correction
GRINDER X FAN TOO SLOW	• Fan runs with reduced frequency for more than three seconds. • Foreign object is blocking the fan.	• Check fan for foreign objects. • Interchange the fans' plugs at the processor board to determine the cause of the malfunction. (fan or socket) • Exchange fan.
CLEAN GRINDER X	• Cleaning counter has reached the pre-set alarm limit. • Counter was not reset after last cleaning process.	• Press PROG-button. Grinders are not blocked. • Clean the grinder (with GRINDZ or unscrew, vakuum, brush) • Reset cleaning counter in software user menu (chapter 9) or • Set cleaning limit higher in software service menu (chapter 6) or • Switch off the cleaning alarm in software service menu (chapter 6). • Recommendation: adjust the cleaning alarm to the weekly amount of shots taken for a regular reminder to clean the grinder.

Alarm Record	Cause	Correction
COVER OPEN	• Magnet switch open. • Grinder's cover open. • Switch's plug not connected at the processor board. • Strand of switch defective. • Magnet switch defective. • Contact magnet in cover missing.	• After closing the magnet switch press PROG-button. Grinders are not blocked. • Check the plug/socket of the switch for correct position. • Bridge the contact in order to rule out defective processor board. • Test new magnet switch • Glue in a new contact magnet into the cover.
LOW VOLTAGE	• Main power board runs at 35% under normal operation. • Power consumption at outlet too high. • Mains voltage too low.	• Switch off and on the grinder. • Check mains voltage. Check junction box.

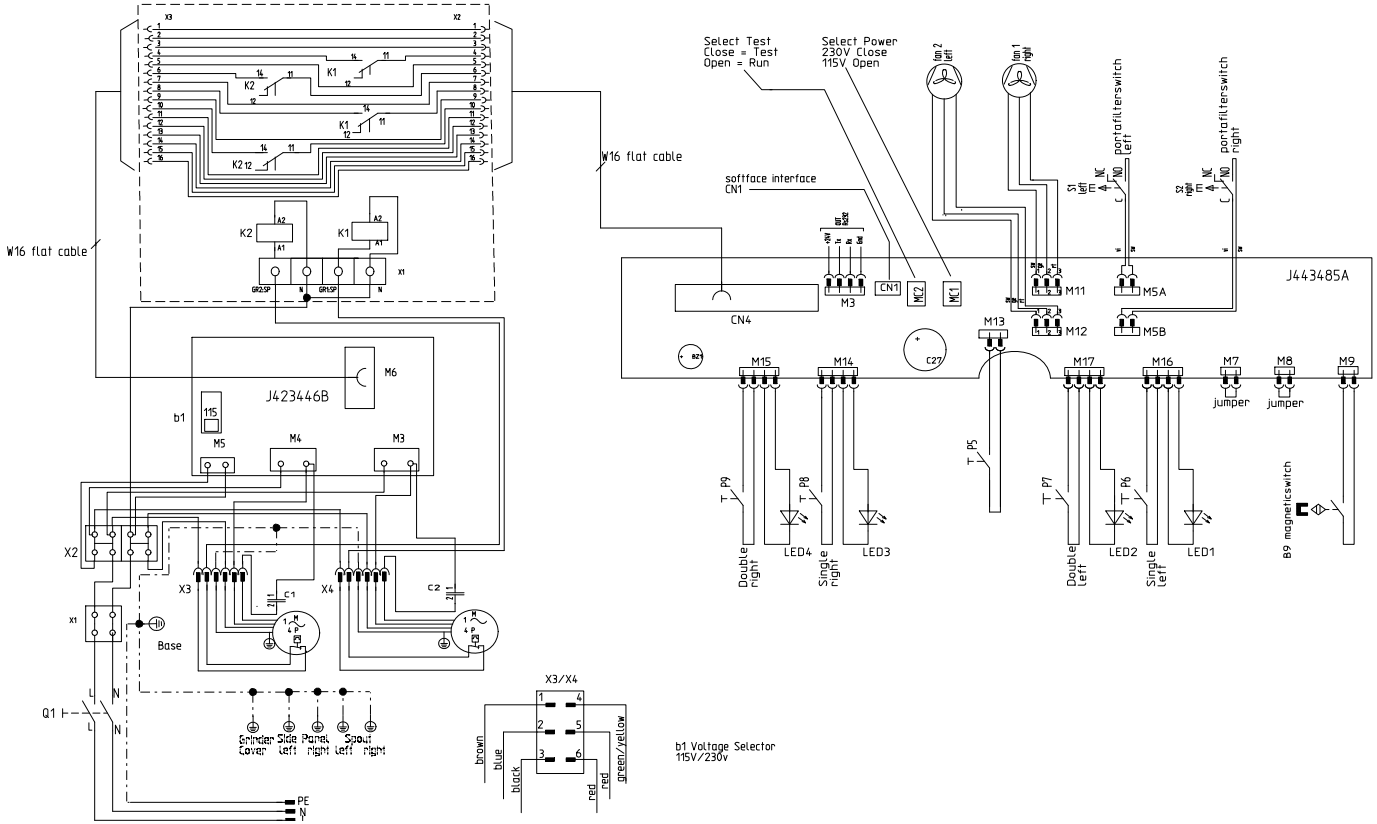
9. Spare Parts

Spare parts are usually ordered from your customer service centre or your local dealer. To ensure quick and correct processing of your order, the following information is absolutely essential:

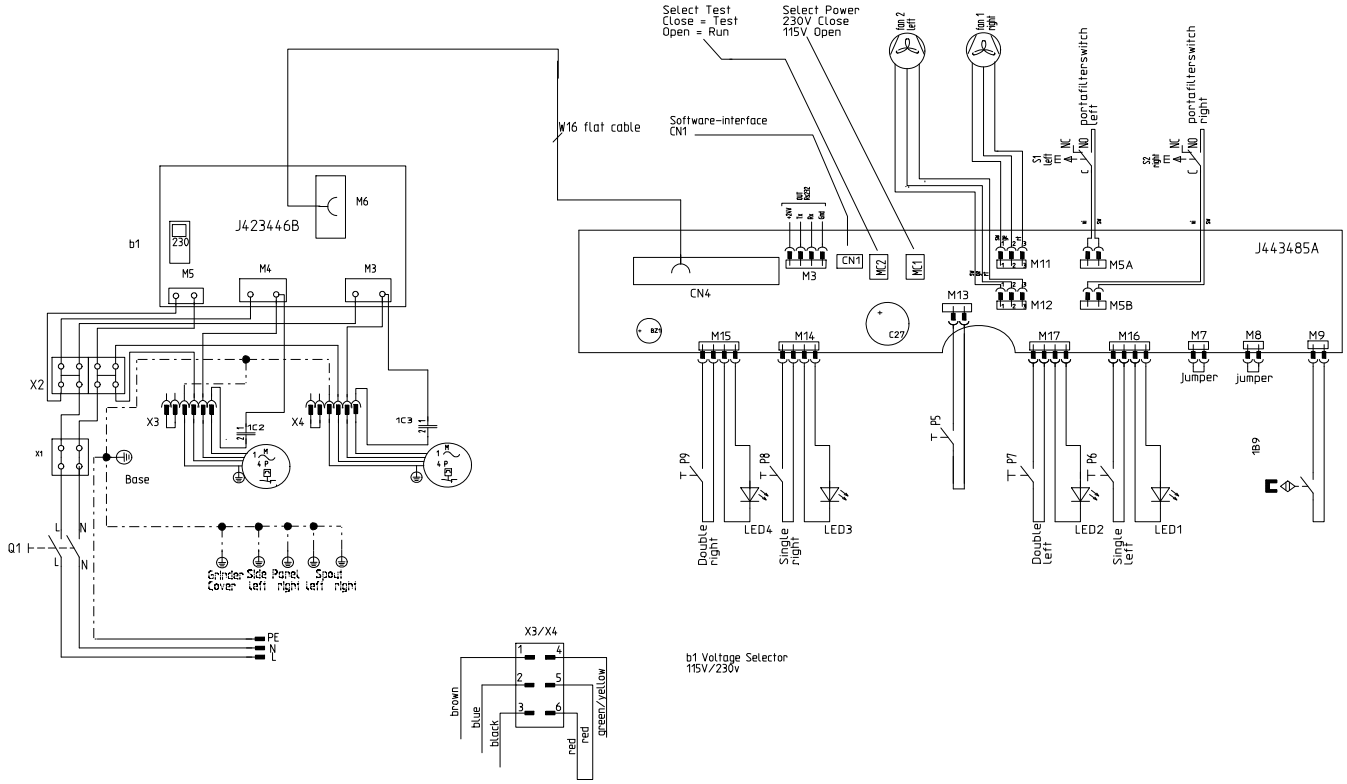
1. Type designation, serial number and voltage of the grinder (on the rating plate underneath the grinder).

2. An exact description of the part to be replaced or the article number.

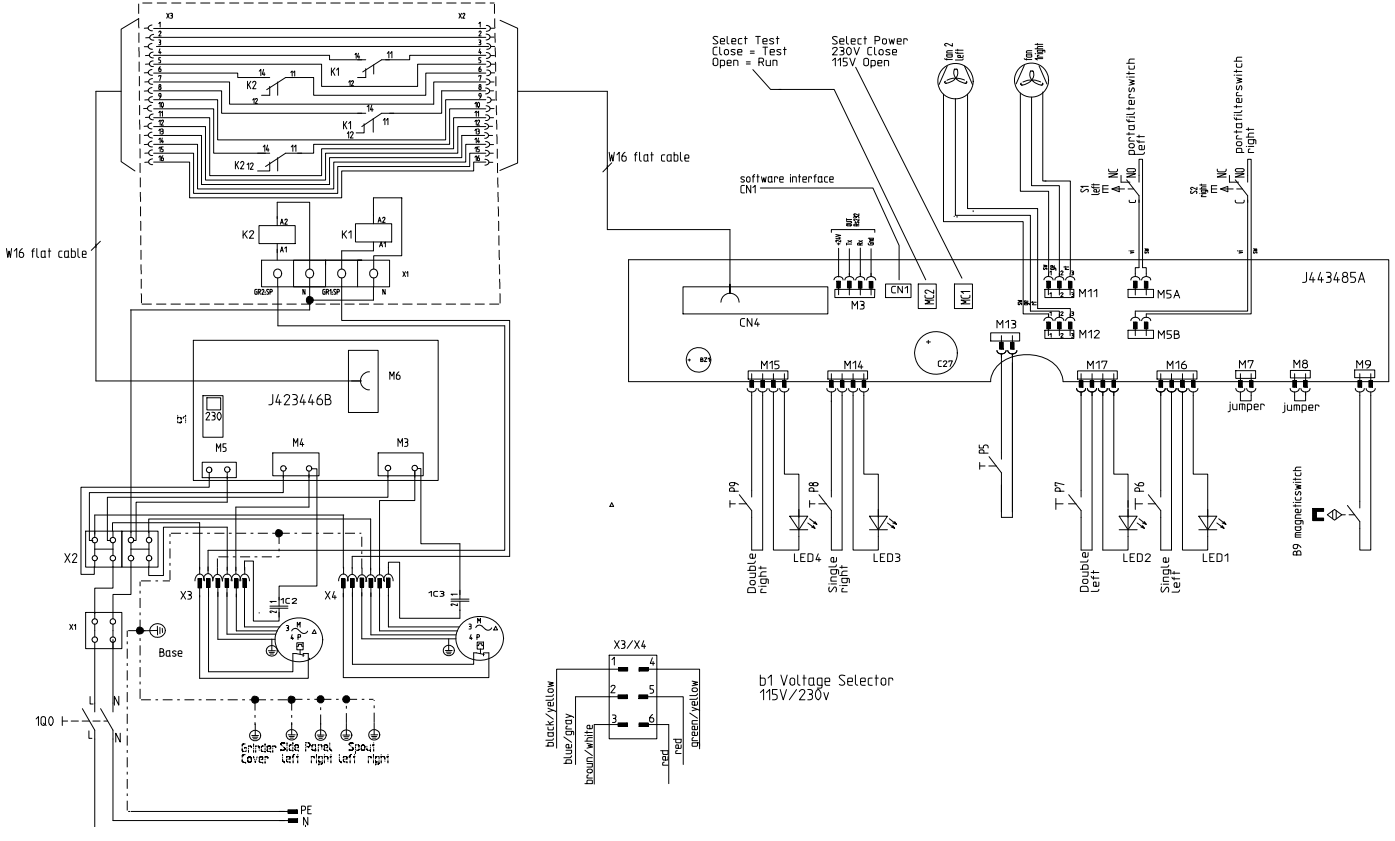
10. Wiring Diagram 100 - 115V 50/60Hz



10. Wiring Diagram 230V 50Hz



10. Wiring Diagram 240V 50Hz



11. Certificate

EC Declaration Conformity
As defined by EMC-directive 89/392/EWG

MAHLKÖNIG GmbH & Co.KG
Tilsiter Straße 142, 22047 Hamburg
Telefon : 040 - 69 69 40 - 0
Telefax : 040 - 69 39 721

Name of the manufacturer or in the EU residential authorized person:

HEMRO AG

Address of the manufacturer or the authorized person:

Bramenstrasse 11 – CH-8184 Bachenbülach

announce, that the machine below

product type	: commercial device for food processing
machine description	: Coffee grinder
machine typ	: K30 TWIN

is in compliance with the conditions of the Directive of Machines 98/37/EG and with the main standards stipulated in the Directive concerning low tension 73/23/EWG and applies to the national laws that transpose it.

Issued in Bachenbülach	: 01.01.2008
Function of subscriber	: Managing Director
Name of subscriber	: Nils Erichsen

Signature

MAHLKÖNIG GmbH & Co. KG, Amtsgericht Hamburg HR A 85 074; Persönlich haftende Gesellschafterin:
Beteiligungsgesellschaft MAHLKÖNIG mbH, Eingetragen Amtsgericht Hamburg HR B 45 324, Geschäftsführer: Nils Erichsen
Dresdner Bank AG (BLZ 200 800 00) Kto. 383 780 400 Postbank Hamburg (BLZ 200 100 20) Kto. 253 89-203
Commerzbank AG (BLZ 200 400 00) Kto. 21 10 294 Ust. Id. Nr.: DE 118 37 22 65

12. Warranty Conditions

1. The warranty period is 1 year from the date of purchase.

2. The warranty covers all damages that can be attributed to inferior materials or defective workmanship. Corresponding grinders will be repaired or replaced free-of-charge, with the exception of transport or freight charges. Transport is the responsibility of the customer. Therefore, avoid damages with all returns by correct packing.

3. The grinder may only be opened for cleaning purposes in accordance with the Operating Instructions.

4. This warranty does not cover damages which have occurred through: Improper usage, improper maintenance, lack of servicing, usage for purposes other than those intended, incorrect installation, incorrect voltage, breakage, natural wear or for reasons beyond our sphere of influence.

5. In order to maintain the warranty, only original spare parts and accessory parts may be used.

6. Observe in addition our General Delivery Conditions in their respective current version.

7. The manufacturer is in no way liable for consecutive or secondary damages.

8. The warranty does not cover costs resulting from repairs conducted by non-authorized personnel.

MAHLKÖNIG GmbH & Co. KG

Tilsiter Straße 142
D- 22047 Hamburg, Germany

Tel.: 040 / 69 69 40-0
Fax: 040 / 69 39 721
office@mahlkoenig.de ; www.mahlkoenig.de

December 2008

Subject to change without prior notice!!

MAHLKÖNIG
The professional art of grinding
since 1924